03040201-050

(Pee Dee River)

General Description

Watershed 03040201-050 is located in Marlboro, Chesterfield, Darlington, and Florence Counties and consists primarily of the *Pee Dee River* and its tributaries from Whites Creek to Black Creek. The watershed occupies 225,702 acres of the Sandhills and Upper and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Chastain-Tawcaw-Lakeland-Pelion-Norfolk series. The erodibility of the soil (K) averages 0.20; the slope of the terrain averages 7%, with a range of 0-15%. Land use/land cover in the watershed includes: 32.5% forested land, 22.6% scrub/shrub land, 20.6% forested wetland (swamp), 18.0% agricultural land, 4.4% water, 1.7% urban land, and 0.2% barren land.

This section of the Pee Dee River accepts drainage from its upstream reaches, along with the Whites Creek Watershed, the Westfield Creek Watershed, Hicks Creek, Husbands Creek, Huckleberry Branch (Wilson Branch), and the Thompson Creek Watershed near the Town of Cheraw. Phils Creek (Wolf Creek, Andersons Millpond, Grants Millpond) enters the river next, followed by Beaverdam Creek, Tarkiln Creek, Naked Creek (Bullards Millpond, McLaurins Millpond, Davids Millpond, Herndon Branch), the Crooked Creek Watershed, Hugh Creek, Reedys Branch, and the Cedar Creek Watershed. Further downstream, near the Town of Society Hill, the river accepts drainage from Buckholtz Creek (Lake Darpo or Spring Lake), Henegan Lake, Lake Creek, Flat Creek, and the Three Creeks Watershed. Another Flat Creek enters the system downstream of Three Creeks, followed by Rogers Creek (Mosey Bay), Hurricane Branch, and Back Swamp (Fountain Branch, Alligator Creek). There are numerous lakes and ponds (totaling 1,493.2 acres) in this watershed and a total of 423.2 stream miles, all classified FW.

Water Quality

Station #	Type	Class	Description
PD-012	P	FW	PEE DEE RIVER AT US 1 NE CHERAW
PD-015	P	FW	PEE DEE RIVER AT US 15 & 401
PD-028	P	FW	PEE DEE RIVER AT SC 34 11 MILES NE DARLINGTON

Pee Dee River - There are three monitoring sites along this section of the Pee Dee River. Aquatic life uses are fully supported at the furthest upstream site **(PD-012)**. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Very high concentrations of cadmium and lead were measured in the 1998 sediment sample. Also in sediments, O,P'DDD (a metabolite of DDT) and PCB-1242 were detected in the 1994 sample, PCB-1248 was detected in the 1996 sample, P,P'DDE (a metabolite of DDT) was detected in the 1997 sample, and P,P'DDT (a metabolite of DDT) was detected in the 1998 sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform

bacteria concentration. At the next site downstream **(PD-015)**, aquatic life and recreational uses are fully supported.

Aquatic life uses are not supported at the downstream site **(PD-028)** due to occurrences of copper in excess of the aquatic life acute standards. In addition, there was a significant decreasing trend in dissolved oxygen concentration. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Lake Darpo - Aquatic herbicides were applied in 1990 to control aquatic plants and provide access for swimming and boating. The treatment was successful and no additional treatments have been necessary.

A fish consumption advisory has been issued by the Department for mercury and includes the Pee Dee River within this watershed (see advisory p. 115).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)
COMMENT

PEE DEE RIVER MOHAWK IND./OAK RIVER MILL PIPE #: 001 FLOW: 0.05 PIPE #: 002. 003 FLOW: M/R

PEE DEE RIVER GALEY & LORD, INC. PIPE #: 001 FLOW: 6.5 WQL FOR DO

PEE DEE RIVER TOWN OF CHERAW WWTP PIPE #: 001 FLOW: 4.0

PEE DEE RIVER
WILLIAMETTE INDUSTRIES/MARLBORO MILL
PIPE #: 001 FLOW: 15.0

WQL FOR DO

PEE DEE RIVER DELTA MILLS MKTG PIPE #: 001 FLOW: 4.2

HICKS CREEK DELTA MILLS MKTG PIPE #: 002 FLOW: 0.041

HUCKLEBERRY BRANCH TOWN OF CHERAW/WTP

NPDES# TYPE LIMITATION

SC0001996 MINOR INDUSTRIAL EFFLUENT EFFLUENT

SC0002704 MAJOR INDUSTRIAL WATER QUALITY

SC0020249 MAJOR DOMESTIC EFFLUENT

SC0042188 MAJOR INDUSTRIAL WATER QUALITY

SC0002151 MAJOR INDUSTRIAL EFFLUENT

SC0002151 MINOR INDUSTRIAL

EFFLUENT

SCG645011 MINOR DOMESTIC

EFFLUENT

Nonpoint Source Management Program

Camp Facilities

FACILITY NAME/TYPE PERMIT #
RECEIVING STREAM STATUS

PINE HILL BAPTIST RETREAT/RESIDENT 34-0031
PHILS CREEK ACTIVE

GIRL SCOUT CAMP/RESIDENT
PHILS CREEK
34-0032
ACTIVE

CAMP PEE DEE/RESIDENT 34-0006 PHILS CREEK ACTIVE

Land Disposal Activities

Landfill Facilities

LANDFILL NAME PERMIT #
FACILITY TYPE STATUS

PALMETTO BRICK IWP-014 INDUSTRIAL ------

CHESTERFIELD CO. LANDFILL DWP-017
MUNICIPAL CLOSED

WILLIAMETTE IND. MARLBORO MILL

INDUSTRIAL

353301-1601 (IWP-243)

Land Application Sites

LAND APPLICATION SYSTEM ND#
FACILITY NAME TYPE

SPRAYFIELD ND0000639
POWELL MANUFACTORING CO., INC. DOMESTIC

Mining Activities

MINING COMPANY PERMIT #
MINE NAME MINERAL

PALMETTO BRICK CO. 0171-69
IRBY MINE CLAY

BECKER SAND & GRAVEL CO. 0096-69

MARLBORO FIELD PLANT SAND/GRAVEL

BECKER MINERALS. INC. 0092-25

CASH PLANT SAND/GRAVEL

PEE DEE SAND & GRAVEL 0466-25

PEE DEE MINE SAND/GRAVEL

DARLINGTON COUNTY 0967-31

RUSSELL #2 SAND/CLAY

Water Supply

WATER USER (TYPE)

STREAM

REGULATED CAPACITY (MGD)

PUMPING CAPACITY (MGD)

10.0

TOWN OF CHERAW (M) 6.0
PEE DEE RIVER 11.5

DELTA MILLS MKTG (M) 7.2
PEE DEE RIVER

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Town of Cheraw and a portion of the Town of Society Hill, and is projected to have one of the largest population growth rates in the region. There are numerous industries in the watershed, most in and around the municipal limits of Cheraw. Commercial development is also centered around Cheraw, particularly west of town along S.C. Hwy. 9, and additional growth is expected. A large portion of the watershed is not served by public water or sewer systems, primarily due to the large expanse of the floodplain associated with the Pee Dee River. These services are provided in and immediately around the Town of Cheraw, and along S.C. Hwy. 34 east of the City of Darlington. The Town of Cheraw is planning a wastewater treatment plant upgrade that should encourage further growth.